



***** **MONTHLY BULLETIN** *****

The Monthly Bulletin is compiled from information retrieved from Monthly migrant pest reports received from SADC member countries and IRLCO-CSA.

MIGRANT PEST REPORTS AND MAPS FOR DECEMBER 2002 & JANUARY 2003

Due to delays in receipt of field reports during the Christmas period, this Bulletin contains the information for the December 2002 and January 2003 migrant pest situation.

Migrant pest reports for December 2002 were received from:
Botswana, Lesotho, Mozambique, South Africa (locusts + Quelea), Swaziland, Tanzania, Zambia, and IRLCO-CSA.
No reports were received from: *Angola, Malawi, Namibia, Zimbabwe (armyworm, locusts or Quelea).*

Migrant pest reports for January 2003 were received from:
Botswana, Lesotho, Malawi, Mozambique, South Africa (locusts + quelea), Swaziland, Tanzania, and Zimbabwe (armyworm + locusts).
No reports were received from: *Angola, Namibia, Zimbabwe (quelea) or IRLCO-CSA.*

Collaborators are kindly requested to read the "General Notices" section for any recent information relating to ICOSAMP.

SUMMARY

December 2002: [Fig.1] Outbreaks of armyworm were reported in Malawi (RLCO-CSA report), Tanzania, and Zambia. IRLCO-CSA also reported outbreaks of armyworm in Kenya. The locust situation in the region remained calm. Unconfirmed reports of breeding colonies of Quelea were received from Mozambique, and 2 roosts were controlled in South Africa.

January 2003: [Fig.2] A widespread outbreak of armyworm occurred in Malawi, Tanzania, Zimbabwe and again in Kenya. Although no report was received from Zambia (therefore not shown on the map), there is a high probability that the outbreak which began in December 2002, continued into January 2003. The locust situation in the region remained calm. Quelea activity was reported from Mozambique, while South Africa undertook 33 control operations against roosts and breeding colonies in the Limpopo and Free State Provinces.

ARMYWORM

NB. An Armyworm ALERT was issued by IRLCO-CSA on 24 December 2002 and immediately distributed to all ICOSAMP collaborators.

Botswana. (Comments from T Moruti). Moth activity is very low and it is still dry in Botswana, especially in the northern and central areas where most traps are located.

Malawi.

December 2002 : (IRLCO-CSA report) Widespread armyworm outbreaks occurred in the Shire Valley, Blantyre, Machinga, Lilongwe, Salima, and Kasungu Agricultural Development Divisions. Chlorpyrifos 50% EC was used for control in the affected areas.

January 2003 : Nine (9) control operations were undertaken against III and IV instar armyworm larvae in the southern and central regions. The size of area infested ranged from 45ha (Chiradzulu) to 3071ha in Balaka. The main crops attacked were maize with damage reported as high as 95% (Phalombe and Balaka) (Table 1). Chlorpyrifos/Dursban was applied with Knapsack sprayers at an application rate of 10 mls/litre.

Table 1. Percentage crop damage in Malawi (Jan.2003)

| Crop | Total Area infested | % Crop Damage |
|---------|---------------------|---------------|
| Maize | 6,791 ha | 30 – 95 |
| Rice | 620 ha | 65 |
| Sorghum | 375 ha | ? |
| Pasture | 1,026 ha | 80 – 85 |

Tanzania.

December 2002 : Two infestations of armyworm were controlled with Diazinon in the Mtwara (250ha) and Morogoro (1250ha) districts where maize, rice, and sorghum crops were attacked.

January 2003 : Four (4) control operations using Diazinon were undertaken against widespread outbreaks of larvae (stage not reported) attacking maize, rice, and sorghum crops. The total area infested was 3,900 ha.

Zambia.

December 2002 : Reports were received of widespread armyworm outbreaks attacking maize and pastures in four provinces of Zambia (Copperbelt, Lusaka, Eastern, and Southern).

No information was received from Zambia for January 2003.

Zimbabwe.

January 2003 : (Comments from G Chikwenhere). Reports were received of outbreaks in seven provinces of Zimbabwe. The larvae (II-VI stage) were found mostly on pasture grasses (>1000 ha) with densities ranging from 20 to 500 larvae per square metre, while in maize fields (>400 ha) densities of 17-30 per plant were recorded. Damage in pastures has been very heavy and in some cases resulting in 100% loss of grassland, and the armyworm have therefore invaded nearby maize fields. So far damage inflicted in maize, sorghum, rapoko and pearl millet ranges between 20-60%. PPRI staff are in the field assisting with the management of the pest.

Kenya.

December 2002 : (IRLCO-CSA report). Armyworm outbreaks were controlled in the Machakos, Makueni, Meru and Kiambu districts. The outbreaks were mainly on pasture. Control was undertaken using Chlorpyrifos and Cypermethrin. (NB. Data not represented on the SADC map).



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LOCUSTS

No reports of locust outbreaks in any of the recognised outbreak areas were received. Surveys are expected to be undertaken in Tanzania during February 2003.

RED-BILLED QUELEA

Botswana:

January 2003 : (Comments by T Moruti). Unconfirmed reports of Quelea breeding in the southern part of Botswana were received. (*Data not available for plotting on the map*).

Mozambique:

January 2003 : Surveys were undertaken in Chokwe, Gaza Province where two large Quelea roosts were located (Manjangue and Bambofo) near rice, millet and sorghum fields. Roosts occupied 8ha with number of birds about 5 million.

South Africa:

December 2002 : Two control operations (1 chemical, 1 explosion) were undertaken against Quelea roosting in reeds in the NW and Free State Provinces near wheat and sorghum crops. One of these sites was identified as a 'traditional' Quelea site. Roost size varied from 0,5ha (Brits) to 3ha (Vrede). The total area invaded was approximately 3.5ha with an estimated number of 400,000 birds. The avicide applied was Falcolan at an application rate of 20 l/ha and the estimated kill achieved ranged from 90 – 99%.

January 2003 : 33 Control operations (32 chemical, 1 explosion) were undertaken against roosts (4) and breeding colonies (29) of Quelea located in savanna habitat (thorns) in the Free State and Limpopo Provinces, near sorghum and millet crops. Damage to crops ranged from 0 – 45%. Thirteen of the breeding sites and one of the roosting sites were classified as traditional sites. The size of the roosts varied from 4 – 8 ha (Tuinplaas) and the total area invaded was 23ha, while the size of the breeding colonies varied from 0.5ha (Warmbad) to 34ha (Settlers), with a total area covering about 198ha. The total number of estimated birds were: roosts – 2,35 million; breeding colonies – 12,3 million. Queletox and Falcolan were used as the avicide and the estimated percentage kill achieved ranged from 66 – 100%.

No further reports of Quelea birds in the SADC region were received.

GENERAL NOTICES

1. We thank DFID for the additional funding received for the development of an internet 'mapper' which should be operational on our website at the beginning of April 2003.
2. We thank SADC, through the Belgium Crop Development Project, for agreeing to finance the ICOSAMP collaborators training workshop to be held as a parallel session at the upcoming ESSA (Entomological Society of Southern Africa) in Pretoria, 6-9 July 2003. Collaborators will soon be contacted to finalise arrangements.
3. **Mr Tonny Maulana** has replaced Mr Wellington Chatepa as the **Malawi** collaborator and we welcome him to the network. He can be contacted via email at pesticideboard@malawi.net
4. A reminder that the **Quelea rainfall / breeding forecast model** is available on the website and should be used as a forecasting tool for decision makers.
5. Collaborators are kindly reminded to make sure that the ICOSAMP migrant pest monthly reporting forms are sent to the Co-Ordinator by the **5th day of the following month**, so that the information can be included in the Monthly Bulletins. Reports should be sent even if **NO** migrant pests were found, or **NO** surveys were conducted.



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Information and Reports can be faxed or emailed to:

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FORTHCOMING EVENTS

Entomological Society of Southern Africa (ESSA) - 14th Entomological Congress, 6-9 July 2003, Pretoria, South Africa. Details can be obtained from their website at <http://journals.sabinet.co.za/essa> or by contacting Dr Gerhard Prinsloo, ARC-PPRI, Tel:+27 12 323 8540 or Fax: +27 12 325 6998 or Email: vrehglp@plant5.agric.za . Deadline for registration is 31 March 2003.

ON THE WEB

Instead of the usual list of websites, only a few sites will be highlighted each month.

Research

www-web.gre.ac.uk/directory/NRI/quel - Quelea rainfall/breeding forecast model that generates a forecast for breeding patterns of *Quelea quelea lathamii* over the whole of Southern Africa.

Climate

http://www.cpc.ncep.noaa.gov/products/african_desk/rain_guidance/safr.html - Outlook for rainfall over southern Africa Feb – April 2003.

Equipment

<http://www.micron.co.uk/migpest.html> - Micron: migrant pest control equipment

Forthcoming

<http://journals.sabinet.co.za/essa> ESSA 14th Congress

ACKNOWLEDGEMENTS

Information is gratefully acknowledged from collaborators in SADC member countries, and the International Red Locust Control Organisation for Central and Southern Africa (IRLCO-CSA) in Zambia. Thanks to EcoPort for hosting our website.

| ICOSAMP COLLABORATORS - 2002 | | | |
|-------------------------------------|-------------------------------------|---------------------------------|----------------|
| SADC | | Additional Collaborators | |
| Angola: | Mr S Mateus | SADC-FANR: | Mr S de Keyser |
| Botswana: | Mr T Moruti | IRLCO-CSA: | Mr J Katheru |
| Lesotho: | Mr E Tjelele | NRI (UK): | Prof B Cheke |
| Malawi: | Mr T Maulana | | |
| Mozambique: | Mr J Varimelo/Mr A Comes | | |
| Namibia: | Ms P Shiyelekeni | | |
| South Africa: | Mr K Viljoen (locusts) | | |
| | Mr L Geertsema (quelea) | | |
| Swaziland: | Mr M Mbuli | | |
| Tanzania: | Mr R Magoma | | |
| Zambia: | Mr M Kanyemba | | |
| Zimbabwe: | Dr G Chikwenhere (locusts/armyworm) | | |
| | Ms T Couto (quelea) | | |
| Co-ordinator | | GIS development | |
| Ms Margaret Kieser, South Africa | | Mrs J Pender, UK | |



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This bulletin has been sent to you by the ICOSAMP co-ordinator in South Africa, **Margaret Kieser**.

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<http://icosamp.ecoport.org>



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Figure 1. Migrant Pest Situation Map for SADC Region: December 2002

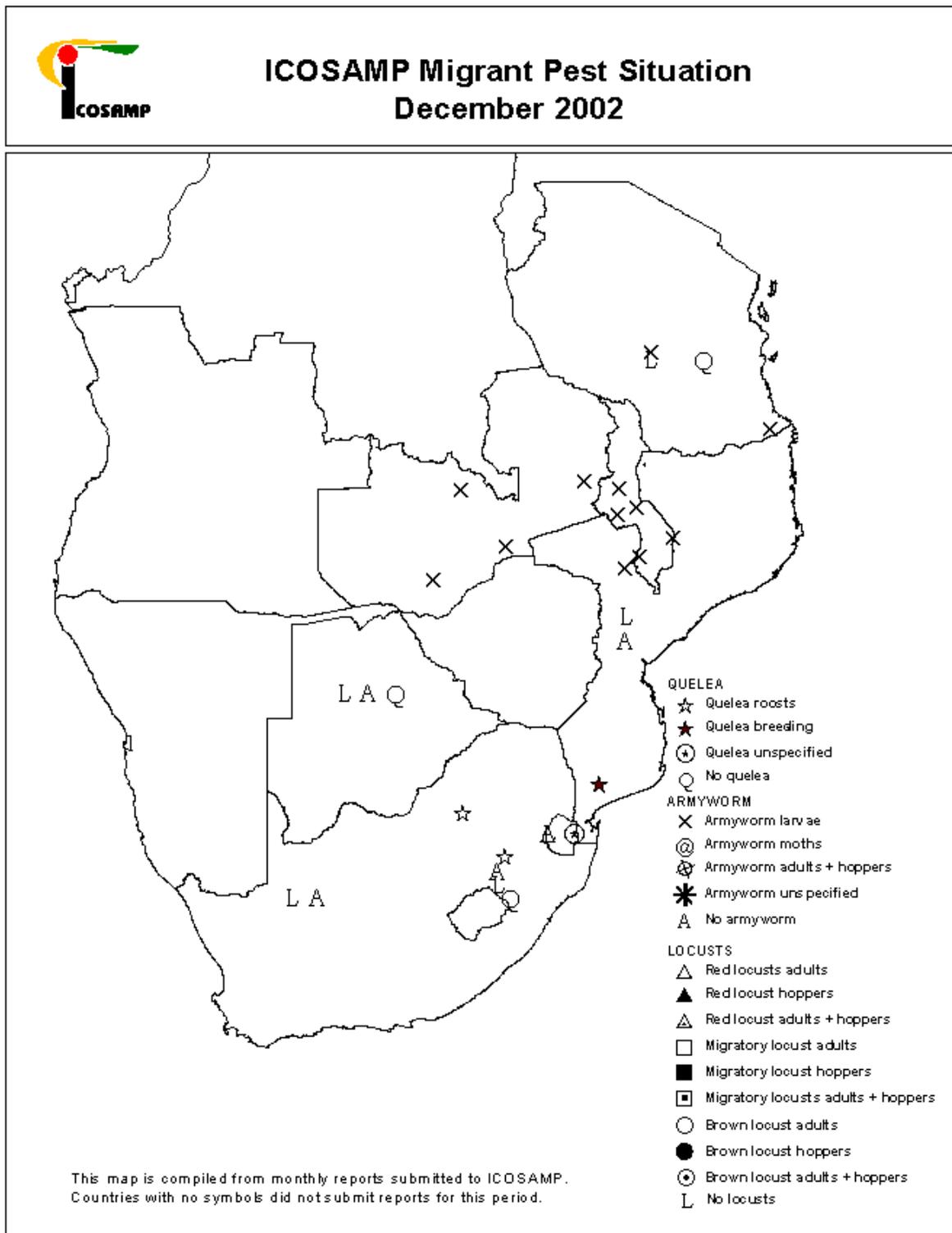


Figure 2. Migrant Pest Situation Map for SADC Region: January 2003

